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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,037	03/11/2004	Yasuaki Nozawa	0171-1068P	4654

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BIRCH STEWART KOLASCH & BIRCH  
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EXAMINER
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HANDAL, KAITI V

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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10/22/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/797,037	Applicant(s) NOZAWA ET AL.	
	Examiner Kaitly Handal	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims contain the limiting phrase "essentially consisting of" which is not supported in the specification.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klebe et al. (4,503,092) and Schutte et al. (DE 1,163,784) in view of Belligoi et al. (US 6,103,004).

With respect to claims 1-12, Klebe et al. discloses an apparatus for the hydrophobization of pyrogenically produced silica comprising: a means for pyrolyzing/burner, (1) to form silica; a coagulation zone/means for agglomerating,

Art Unit: 1797

(2); a series of cyclones (4, 5, 6); a fluidization vessel (11) which can hydrophobize and deacidify (col. 3, lines 35- 36); and a second cyclone (8) connected to an output (13) of the fluidization vessel (11); and a conduit network extending between the second cyclone (8) and the deacidifying section (inside vessel (11)) or the device for removing halogen gas, the conduit network providing a flow path for returning hydrophobic silica collected by the second cyclone and/or the second filter to the deacidifying section or the device for removing halogen gas (as illustrated).

Klebe et al. has incorporated by reference the Schutte et al. patent.

Schutte et al. discloses wherein the deacidification and hydrophobization can take place in separate zones as well as in a single zone (col. 4, lines 54-60). Therefore, it is disclosed that it is known in the art that the hydrophobizing and deacidifying can be divided.

Klebe et al. fails to disclose wherein the apparatus also comprises filters. Belligoi et al. teaches that pyrogenically prepared silica (col. 1, lines 19-23) can be separated from solids using a cyclone followed by a filter (col. 2, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to also provide filters along with the cyclones in the device of Klebe et al. in order to achieve a desired level of separation as well as since filters are recognized by Belligoi et al. as a known separation means for pyrogenically prepared silica. Although the recitations of operational temperatures and velocities continue to be directed to a manner of operating the claimed device, and thus amount recitations of intended use (the manner of operating a device dos not

Art Unit: 1797

differentiate apparatus claims from the prior art; MPEP 2114), Schutte et al. further discloses operating temperatures of the device of 200°C to 800°C, especially 400°C-600°C (col. 3, line 48- col. 4, line 5) and velocities of about 2.0 cm/sec (col. 7, lines 26-36).

### ***Response to Arguments***

#### **Prior Art rejection**

Applicant submits that the disclosure of Klebe et al. & Schutte et al. does not teach having a deacidifying section equal to that of the instant application. Examiner respectfully disagrees. The disclosure made by Schutte et al. as referenced in Klebe suggests that it is known in the art that the deacidification and hydrophobization can take place in separate zones as well as in a single zone (col. 4, lines 54-60) and, therefore, it is disclosed that the hydrophobizing and deacidifying can be divided. Hence, there is a deacidifying section in Klebe.

Applicant argues that Klebe's apparatus is materially different from the function attributed to "a second cyclone and a second filter" in the applicant's claims 1 and 2 and "a conduit network" in applicant's claim 9. Examiner respectfully disagrees. Klebe does teach having a second cyclone (8) structurally connected to a "conduit network" (as illustrated), said second cyclone (8) is downstream of a first cyclone (4, 5, 6) and also downstream of the top of the fluidized bed reactor (11), said second cyclone (8) solid silica to the fluidized bed reactor (11) (col. 3, lines 24-36). Klebe fails to explicitly teach having a filter with second cyclone but he does suggest filtering and separation of the

Art Unit: 1797

solid silica (col. 3, lines 26-29), and as set forth above, Belligoi teaches a filter/cyclone combination.

Applicant argues that the application of the Belligoi teachings to the Klebe et al. apparatus, as proposed by the Examiner, would have been counterintuitive, not to mention unobvious. Examiner respectfully disagrees. Klebe et al. fails to disclose wherein the apparatus also comprises filters, but he does suggest filtering and separation of the solid silica (col. 3, lines 26-29), and as set forth above. Belligoi et al. teaches that pyrogenically prepared silica (col. 1, lines 19-23) can be separated from solids using a cyclone followed by a filter (col. 2, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to also provide filters along with the cyclones in the device of Klebe et al. in order to achieve a desired level of separation as well as since filters are recognized by Belligoi et al. as a known separation means for pyrogenically prepared silica. Regarding the physical state of the material worked on, neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP § 2114 and 2115. Further, process limitations do not have patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim."

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

Art Unit: 1797

are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that it is not obvious to combine Klebe et al. and Schutte et al. and Belligoi et al., the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1797

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaity Handal whose telephone number is (571) 272-8520. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KH

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10/10/2007



Glenn Caldarola  
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